Ammonia or Total Kjeldahl Nitrogen (TKN) by Ion Selective Electrode **SM 4500-NH_3 D-1997 (2011)**

ADDITIONAL QC REQUIREMENTS FOR THIS METHOD: Certified or Accredited laboratories using this method are assessed to applicable requirements of SM 1020 and SM 4020. Also refer to appropriate checklist for TKN sample digestion.

Facility Name:_____VELAP ID_____

Assessor Name:_____Analyst Name:_____Inspection Date_____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst:_____ Sample ID: _____ Date of Sample Preparation:_____ Date of Analysis:_____					
1) Were samples refrigerated at ≤6°C, preserved to a pH of less than 2 with H_2SO_4, and analyzed within 28 days?	40 CFR 136.3				
2) Were samples checked for residual chlorine, and if present, were they treated with a dechlorinating agent?	NH3-A.2				
3) Were 100 mL aliquots of sample used?	NH3-D.4.b				
4) Was the electrode always immersed prior to the addition of 10N NaOH (or NaOH/ EDTA), as ammonia may escape solution immediately after addition and not enter the probe?	NH3-D.4.b				
5) Was sufficient volume of 10N NaOH added to samples during measurement to have brought sample pH above 11? *(1 mL is usually sufficient.)*	NH3-D.4.b				
6) If more than 1mL of NaOH is added to samples, is the volume noted and used for calculation of result?	NH3-D.4.b				
7) Was the electrode allowed to stabilize after the addition of NaOH and prior to recording the millivolts for at least 2 to 3 minutes for standards and samples containing ≤1 mg NH_3-N/L?	NH3-D.4.b				
8) Was a calibration curve prepared by analyzing standards from lowest to highest concentration and plotting ammonia concentration versus potential in millivolts?	NH3-D.4.b,c				
9) Did the calculations take into account volume of NaOH used and dilution factors?	NH3-D.5				
Notes/Comments:					